

IN THE SPECIFICATION:

In the following amendments, blank lines are counted.

Please insert the following heading as a new paragraph after the title on page 1, line 1: BACKGROUND OF THE INVENTION

Please insert the following heading as a new paragraph at page 2, line 12: SUMMARY OF THE INVENTION

Please insert the following heading as a new paragraph at page 3, line 17: BRIEF DESCRIPTION OF THE DRAWINGS

Please insert the following heading as a new paragraph at page 4, line 6: DETAILED DESCRIPTION

Please replace the two paragraphs beginning at Page 1, line 9 with the following rewritten paragraphs:

Synchronizing systems serve in manual transmissions for producing a synchronism between two gears mounted on a common shaft before a driving connection is produced between these gears. For this purpose a synchronizing ring is provided between the drive gear on the shaft and the driven gear mounted for rotation on the shaft, and can be urged into frictional engagement with the driven gear. When the shift sleeve on the

driving gear is shifted toward the driven gear, its internal teeth run first against beveled teeth of the synchronizing ring, so that a frictional face of the synchronizing ring is urged against the driven gear. As long as the rotatory ~~speed~~ speeds of the driving and driven gears are not the same, the torque exerted by the friction produced by the contact with the synchronizing ring prevents any further displacement of the shift sleeve. Only when the rotary speeds are equal can the synchronizing ring rotate relative to the shift sleeve to a position wherein the shift sleeve can be shifted against external teeth on the driven gear, so that the driven gear is coupled torsionally to the driving gear. The thrusters arranged between the driving gear and the shift sleeve eliminate the free play between the driving gear and the shift sleeve and thus contribute to the reduction of noise and wear.

In DE 195 80 558 C1 a synchronizing system of this kind is described, in which the axial grooves serving to accommodate the thrusters have a T-shaped profile. The housings of the thrusters have a shape complementary to this profile and are supported on the shoulders of the T-shaped groove near the end that is provided with the detent thruster. Thus the thrusters are guided for displacement in the grooves. The thrusters detents are biased by the springs into recesses in the internal teeth of the drive gear. When the shift sleeve is shifted the thrusters are

first carried a short distance until they abut against the synchronizing ring. Only then are the ~~thrusters~~ detents forced back against the force of the spring, so that the shift sleeve can be shifted further by overcoming the slight resistance of a catch. The manufacture of the T-shaped grooves, however, is relatively expensive. Moreover, a relatively great amount of space is required to accommodate the thrusters, and due to the grooves widened at the radially outer ends the external teeth of the gear are interrupted on a relatively great circumferential length. Furthermore, as the thrusters shift, friction and wear occur because the widened heads of the casings are driven by the springs with great force against the shoulders of the T-slots.

Please replace the paragraph beginning at Page 3, line 1 with the following rewritten paragraph:

The casing of the thruster is preferably made of plastic and at the end, which receives the detent thruster, a ball catch for example, an abutment is formed which secures the ball catch against escape. The bottom of the casing is preferably slightly rounded, so that it can roll on the bottom of the groove in the gear during the tilting movement.

Please replace the paragraph beginning at Page 5, line 22 with the following rewritten paragraph:

Figures 7 to 9 show the thruster 26' which differs from the thruster 26 previously described, in that the casing 32 has on the radially outer (upper in Figures 7 to 8) end a thickened head 46 of ~~longitudinal elongated~~ rectangular plan which extends in the direction of the axial slot 24. In this manner a better guidance of the casing 32 in the slot 24 is obtained, and at the same time greater rigidity in the crimps 38.

Please replace the two paragraphs beginning at Page 6, line 16 with the following rewritten paragraphs:

In the movement of the shift sleeve 14 between the positions shown in Figures 1 and 10 there is thus no need to overcome any frictional resistance, since the thrusters 26 act equally as joints which permit the relative movement between gear 12 and shift sleeve 14 and at the same time always ~~allow for~~ eliminate any free play.

The synchronizing ring 20 in the state shown in Figure 10 has been shifted ~~by~~ to bear with a conical friction surface against an external taper 50 of gear 22, so that gear 22 is accelerated or retarded by friction to the rotatory speed of the unit formed by gear 12, shift sleeve 14 and synchronizing ring 20. As long as equality of speed is not reached, the tooth

slopes of the external teeth 48 of the synchronizing ring 20, which is then still subject to a high torque, offer so much resistance to the movement of the shift sleeve 14 that the internal teeth 16 still cannot be brought into engagement with external teeth 52 of gear 22. Not until the speeds become equal can the shift sleeve 14 be shifted further into the position shown in Figure 11, in which it produces a coupling action between gears 12 and 22. Since the detent ball 28 can no longer participate in this further movement of the shift sleeve 14, it is forced out of the recess 30 in the shift sleeve against the force of the spring 34. When gear 22 is coupled with gear 12 a detent resistance produced by the thrusters 26 has to be overcome.

Please replace the paragraph beginning at Page 4, line 11 with the following rewritten paragraph:

On both sides of the gear 12 and the shift sleeve synchronizing rings 18 and 20 are arranged which rotate together with the gear 12 and the shift sleeve ~~16~~ 14, but are able to rotate relative to the gear 12 within a limited angular range. On the side of synchronizing ring 20 opposite the gear there is shown a gear 22 which is mounted for rotation on the shaft 10 and can be coupled by the shift sleeve 14 to the gear 12 to rotate with the latter. On the side of the other synchronizing ring 18

facing away from the gear 12 there is an additional gear with a different diameter, which is not shown. By the displacement of the shift sleeve 14 in one or the other direction, either the gear 22 or the additional gear not shown can be driven by the shaft 10, so that different ratios can be established in the transmission.